

CLAIMS

What is Claimed is:

5

1. A display apparatus for providing multi-sided viewing functionality to a portable computer system, said apparatus comprising:

a) a front cover mechanically and electrically coupled to said portable computer system, said front cover comprising a hinge;

10 b) a first display component coupled to said front cover;

c) a second display component coupled to said portable computer system;

and

d) a display control circuit for enabling said first display component and said second display component, said display control circuit coupled to said

15 portable computer system, said display control circuit responsive to the orientation of said front cover.

2. The display apparatus of Claim 1 wherein said first display component and said second display component comprise a front display portion
20 and a rear display portion.

3. The display apparatus of Claim 1 wherein said hinging mechanism of said front cover is adapted to open and close said front cover, such that when said front cover is open, said front cover is in an open position, and when said
25 front cover is closed, said front cover is in a default position.

component, said display control circuit responsive to the orientation of said front cover.

7. The display apparatus of Claim 6 wherein said first display
5 component and said second display component comprise a thin flexible transparent material, said thin flexible transparent material analogous to mylar.

8. The display apparatus of Claim 7 wherein said transparent material
comprises a first layer and a second layer, said first layer and said second layer
10 coupled to each other, such that they create a sealed chamber.

9. The display apparatus of Claim 8 wherein said sealed chamber
comprises a first transparent conducting layer and a second transparent
conducting layer disposed within said sealed chamber, said first transparent
15 conductive layer and said second transparent layer responsive to voltage applied by said display control circuit.

10. The display apparatus of Claim 9 wherein said first transparent
conducting layer and said second transparent conducting layer are indium tin
20 oxide.

11. The display apparatus of Claim 10 wherein said first transparent
conducting layer is disposed toward said front display portion and said second
transparent conducting layer is disposed toward said rear display portion.

12. The display apparatus of Claim 8 wherein said sealed chamber further comprises a fluid, said fluid comprising a first colored liquid and a, at least, second colored liquid.

5

13. The display apparatus of Claim 8 wherein said sealed chamber is predominately filled with said first colored liquid.

14. The display apparatus of Claim 12 wherein said first colored liquid is white ink.

15. The display apparatus of Claim 12 wherein said second colored liquid is black ink.

16. The display apparatus of Claim 15 wherein said black ink is transparently encapsulated.

17. The display apparatus of Claim 16 wherein said transparently encapsulated black ink is electrostatically charged.

20

18. The display apparatus of Claim 17 wherein said transparently encapsulated black ink is attracted to said voltage provided by said display control circuit, said voltage is a more positive voltage.

flippable cover comprising a third display component having a front display panel and a back display panel; wherein

said front display panel of said second cover is active to display first images provided said first and second covers are closed; and wherein further,

5 upon said second cover opening, said front display panel of said second cover becomes deactivated, said back display panel of said second cover becomes activated and displays said first images and said first display panel of said first cover becomes activated for the display of second images; and wherein further,

10 upon said first cover opening while said second cover is open, said front display panel of said first cover becomes deactivated, said back display panel of said first cover becomes activated and displays said second images and said first display component becomes activated for the display of third images.

15 23. A portable electronic device as described in Claim 22 wherein said first and said second display components are flat panel display screens.

24. A portable electronic device as described in Claim 22 wherein said flat panel display screens comprise electronic ink technology.

20

25. In a portable computer system configured with a flexible cover mounted display having a first and second side and a display screen integral with said portable computer system, a method for utilizing coupled multiple display capabilities, said method comprising:

